THE CHILD-CAREGIVER OBSERVATION SYSTEM INSTRUCTOR'S MANUAL

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INSTRUCTIONS FOR OBTAINING ADDITIONAL C-COS TRAINING AND RELIABILITY TEST MATERIALS

Training and test videotapes are available for research use. An audiotape that prompts observers to observe and record what they have seen is also available. To preserve the reliability of the videotaped test, this version of the manual does not include the transcripts of the test tapes and their corresponding codes. All of these materials are available from Mathematica Policy Research, Inc. for the price of copying and shipping. Those requesting the videotapes will be asked to sign a form stating that they agree to keep the content of the tapes confidential, only use the tapes for research purposes, and destroy the tapes after their research project is completed. Please contact Jackie Allen at jallen@mathematica-mpr.com.

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I. INTRODUCTION

The Child-Caregiver Observation System (C-COS) was designed as part of the Early Head Start (EHS) National Evaluation 24-month child care assessment. It was created by incorporating features of two previously developed observation procedures: (1) the Observational Record of the Caregiving Environment (ORCE) (NICHD Early Child Care Research Network 1997) developed for the NICHD Study of Early Child Care, and (2) the Adult Involvement Scale developed by Carollee Howes (Howes and Smith 1995). C-COS is a child-focused observation system that captures the experiences of an individual child in a caregiving environment over a two-hour period using a timesampling procedure. C-COS can be used to gather information about the care experiences of children from 1 to 5 years old. The measure focuses on the kinds of behaviors known to be important for young children, such as the frequency of adult language directed to a child, whether the child is smiling or laughing or upset and crying, the overall quality of caregiver behavior toward the child, and the child's behavior toward the caregiver and other children in the care setting. Unlike many child care quality-rating systems, C-COS can be used in all types of child care settings because it is based on the child-caregiver interaction, regardless of the place in which care is provided. Whether these interactions take place in child care centers, family child care homes, or in family settings, C-COS can be used to assess their quality.

C-COS was designed to supplement other child care quality measures and can easily be used with them. For example, in the EHS evaluation, data collectors are conducting C-COS observations during the same child care observation visit in which the Arnett Scale of Caregiver Behavior (Arnett 1989), the Infant/Toddler Environment Rating Scale (ITERS) (Harms, Cryer, and Clifford 1990), the Early Childhood Environment Rating Scale (ECERS) (Harms and Clifford 1980), or the Family Day Care Rating Scale (FDCRS) (Harms and Clifford 1989) is completed. In fact, we recommend

that C-COS be used in combination with other methods. For example, conducting counts of the children and caregivers in the classroom being observed is a good way to set the stage for the child-focused observations. In the EHS evaluation, we developed the Child-Adult Activity Counts procedure (Appendix A contains a copy of the form), which measures the number of children and adults and describes the type of activity in which the children--and the focus child, in particular--are engaged. This information adds meaning to the C-COS codes when the data are analyzed.

Although this manual contains a description of the C-COS as it was used in the EHS evaluation, the system can be modified to meet individual program's or researcher's needs. For example, the length of the child care visit can be extended and the number and duration of observation cycles increased.

We designed this manual to aid your presentation of the C-COS to trainees. It is a combination of text and bulleted lists you can use during training. The manual also is available on disk, so you can customize it to meet your needs.

A. INSTRUCTOR PREPARATION

Before you begin training on the C-COS, become familiar with all the training and reliability-testing materials. We estimate that it will take you 16 hours to review the materials and become familiar enough with them to instruct others. The materials are listed below:

- Coding Manual, Form, Exercise (Appendix B)
- Exercise Answer Key (Appendix C)
- Training Videotape
- Training Scripts (Appendix D)
- Audiotape

- Test Videotape
- Test Scripts (Appendix E)

B. TRAINEE PREPARATION

Ask trainees to read the C-COS coding manual, review the C-COS form, and complete the C-COS exercise on coding type of provider language before the training session begins. Schedule one hour for the "lecture" portion of the C-COS training and three and one-half hours for the coding practice portion of the training. Post-training activities will be done by trainees on their own. After training, the trainees should review the training videotape and C-COS training scripts. When they are confident that they know the coding system, trainees should practice doing the C-COS in the field (for practice, ask them to visit at least one child care center and one family child care home). You will test their reliability by asking them to code the C-COS test tape.

II. INTRODUCING THE C-COS TO TRAINEES

A. ORIGIN AND RATIONALE FOR USING C-COS

- The C-COS was developed for the Early Head Start National Evaluation and is based on two other child-level rating systems: (1) the NICHD Study of Early Child Care Observational Record of the Caregiving Environment, and (2) the Adult Involvement Scale developed by Carollee Howes.
- The C-COS was developed to measure the frequency and quality of caregiving behaviors directed toward an individual child. Child behaviors--including talking, emotional state, and interaction with materials, caregivers and other children--also are recorded.
- The C-COS is a child-level measure and can be used in conjunction with other room-level measures of child care quality, including the ITERS, the ECERS, and the FDCRS.
- The C-COS can be used to document the frequency and quality of caregiving behavior in all types of child care settings, from center care and family child care to relative care.

B. USING C-COS DURING A CHILD CARE OBSERVATION

- The C-COS is conducted during a two-hour child care observation. Every 20 minutes, the observer begins a child-focused observation that lasts 5 minutes, during which the observer is prompted by an audiotape to observe the child for 20 seconds and record the codes on the coding sheet for 10 seconds.
- Observers can play the audiotape on a cassette player worn around the neck or clipped to clothing. We recommend using an earphone that clips to the ear, rather than headphones, so the observer can hear what is going on in the care setting.
- At the end of each five-minute child-focused observation, the observer also completes
 three ratings of the overall quality of the caregiver behavior toward the child, the child's
 behavior toward the caregiver, and the child's behavior toward other children in the care
 setting.
- During a two-hour child care visit, six child-focused observations are completed.

C. MATERIALS REQUIRED

• For each C-COS visit, the observer needs to bring six blank C-COS rating forms, a cassette player, an earphone, and a clipboard or something else to lean on.

III. C-COS DEFINITIONS AND CODES

- Instruct the trainees to look at the coding form while you review the definitions and codes. (See Exhibit 1 on page B.9 of Appendix B).
- We refer to the study child as "focus child," or "FC." All the codes are specific to the focus child or the focus child as part of a group of other children. For example, when a caregiver directs the focus child and other children sitting on the floor to get up and get ready for snack, we code the caregiver's instruction as being directed to the focus child as part of a group. However, when the focus child is sitting with the group during art, and the caregiver instructs another child to stop drawing on the table, that language would not be coded because it is not directed to the focus child or to the entire group.
- We refer to the focus child's primary caregiver as the "direct provider of care," or "DP" In settings where primary caregivers are not assigned, choose the lead teacher as the direct provider of care.
- All adults who come into the caregiving setting are not caregivers. Our definition of "caregiver" is someone who normally takes care of children in the room or setting being observed. We do not code the language spoken to the focus child by a parent dropping off her child. A parent who regularly volunteers in the focus child's room would be counted as a caregiver. If a caregiver from a different room stops by to visit the caregivers in the focus child's room, however, we would not code her language or her behavior directed to the focus child.
- Teachers who come into the room during the observation to lead special activities like art or music are to be counted as caregivers.
- There are eight coding categories in the C-COS. The first five, labeled A through E on the C-COS form, are filled in during the 10-second record periods that occur throughout each five-minute child-focused observation. The overall quality ratings, F through H, are completed at the end of the five-minute observation.
- In all sections except E, F, G, and H, you can code more than one category.

A. TYPE OF CAREGIVER TALK

- Distribute the answer key for the exercise "Type of Caregiver Talk." Discuss any questions trainees have about the correct answers.
- To be scored as talk, the caregiver must use intelligible speech. Simply imitating a child's babble is not counted as talk.

- Discuss the difference between the first code, "Responds to FC Talk," and the other four categories. When a caregiver responds to something the FC said, that language is *always* coded twice in this category, first as "Responds," then as the specific type of talk used to make the response. For example, if the FC calls out to the caregiver by name and the caregiver responds, "Judy, what do you want?" then "Responds to FC Talk" would be coded; because the response is a question that requires the FC to communicate, "Language or Communication Requested" also is coded.
- Every caregiver utterance coded as "Responds to FC Talk" also is coded as another type of caregiver talk, but not everything a caregiver says is a response to something the focus child said. For example, when a caregiver joins a group of children who are playing by the sandbox, the caregiver may make a comment directed to the focus child, "That is a big castle you are making," which would be coded only as "Other Talk/Singing."
- Discuss the distinction between "Language or Communication Requested" and "Action Requested." We often use polite directives when we ask others to do something. For example, we may phrase requests for action as questions that seem as if they might need a verbal response, "Can you put the markers away?" The question is not about whether the child is capable of putting away the markers; rather, it is a softer way of directing the child to put the markers away. Questions like this are coded as "Action Requested."

B. FC TALKS TO ...

- We are documenting how often and to whom the focus child speaks because it is possible that in some settings more language is encouraged and the focus child may speak more to his or her primary caregiver.
- Young children often babble to themselves or to others. Observers may have to use their judgment to determine the person the focus child is speaking to.

C. FC INTERACTION WITH OR ATTENDING TO ...

- We will use this coding category to identify whether the child is interacting with or attending to other children or caregivers, playing with or exploring materials, watching television or a video, or wandering/unoccupied.
- Use this code every time the child attends to another person or materials in the care environment. By "attending," we mean that the child has to be either looking at a child or caregiver or actively engaged with an object. Simply leaning on a wall would not count as interacting with the wall; pounding on the wall, however, would count.

- When the focus child is part of a group of children and is engaged in an activity with them, such as singing, "Other Children or Group" would be coded.
- To be coded in the "Television or Video" category, the focus child must be attending to the television or video. For example, if the television is on but the child is painting and is not paying attention to the television, "Television or Video" would not be coded.
- The focus child has to be wandering or unoccupied for five consecutive seconds to be coded as "None: Wandering/Unoccupied." Here, walking across the room to join a group or get a toy does not count. For this category, we are looking for behavior that does not seem purposeful.

D. FC WAS...

- This coding category captures instances of high affect and aggressive behavior directed toward the focus child by other children or from the focus child toward other children.
- The frequency of smiling/laughing is associated with good experiences in child care, and the frequency of being upset or crying is associated with poor experiences.
- Similarly, we are interested in recording the frequency of aggressive behaviors directed toward the focus child and the frequency of aggressive behaviors by the focus child to other children. Settings that do not require the children to exercise much self-control have a higher probability of greater negative child-child interactions.

E. THE MAIN CAREGIVER INTERACTING OR ATTEMPTING TO INTERACT WITH FC WAS . . .

- Only one category is coded here. We want to know who the main caregiver was that interacted most with the focus child.
- If two caregivers interact with the focus child, or with the focus child as part of a group for about the same amount of time, code "All Caregivers Roughly Equal."
- Do not include the intensity of the interaction in the coding of this item. For example, if two caregivers interacted with the focus child for the same length of time, but one was leading the children in a discussion about making a cake and the other was trying to get the child to put on a smock, you would still code "All Caregivers Roughly Equal" because the intensity of the interaction does not weight one interaction more heavily than the other.

F. OVERALL QUALITY RATINGS:

CAREGIVER BEHAVIOR TOWARD FOCUS CHILD FOCUS CHILD BEHAVIOR TOWARD CAREGIVER FOCUS CHILD BEHAVIOR TOWARD OTHER CHILD(REN)

- These codes are overall quality ratings recorded after the five-minute child-focused observation has been completed.
- The overall quality ratings do not distinguish between the direct provider of care and the other caregivers. Their behavior must be mentally "averaged" for this rating.
- Take into account everything that happened during the 10 observe periods of 20 seconds each.
- Review the rating definitions. "Ignoring/None" means that there was no interaction during the five-minute observe period. "All Negative" and "All Positive/Neutral" are the two extremes, and "Mostly Negative" and "Mostly Positive/Neutral" are in between.
- An easy way to complete these ratings is to begin by asking about the extremes. For example, think about the caregiver's behavior toward the focus child. If there was some interaction during the observe periods, move on and ask whether the interaction that occurred was all positive or all negative. If neither code applies, choose either "Mostly Negative" or "Mostly Positive," depending on the circumstances.

IV. USING THE TRAINING TAPE AND TRAINING SCRIPTS

- After completing the lecture and discussion portion of the training, you will begin using the C-COS training tape. The tape contains five training segments of five minutes each. Center and family child care are included on the tape.
- You will start and stop the training tape repeatedly throughout the video training portion of your presentation. Make sure you have a good remote control or someone to assist you.
- Make sure you have a television monitor that is large enough for the number of trainees you are training. Trainees need to be close to the screen, and the volume must be loud.
- Trainees should have blank coding forms, the C-COS training scripts, and a pencil in front of them during this portion of the training. Do not distribute the test scripts. You will use them after training.
- The training scripts contain the master codes for the training tape. The child, direct provider of care, and the main activity are described for each script. The times on the coding scripts correspond to the times stamped on the tapes. The codes observed and specific examples of "Type of Caregiver Talk" are listed for each 20-second observation period. Each letter listed on the scripts corresponds to a coding category on the observation form. Only categories of codes that were observed in a particular time segment were included. If nothing occurred in a particular time segment for a given coding category (for example, none of the caregivers spoke to the focus child), then nothing is recorded on the training script for that coding category. There is always something coded for "E. The Main Caregiver Interacting or Attempting to Interact with FC Was. . ."
- We shortened the names of the codes on the scripts to make them easier to use. For example, each code under "Type of Caregiver Talk" is listed as the first word-"Responds to FC Talk" is listed on the scripts as "Responds." We included some narrations and explanations of how we coded particular events in brackets.
- Some trainees do not like to have the training scripts in front of them; others like to have them there to check their work independently.
- The tape describes the focus child and the direct provider of care. The tape also announces when trainees should observe and record their responses.
- We base the pace of the presentation on how well the trainees seem to be learning how
 to manage the coding system. In the beginning, you will have to rewind and repeat each
 20-second segment at least twice. The number of repeat viewings trainees require will
 decrease as you work on the last two training segments. Do not rush trainees through
 the early segments.

- "Type of Caregiver Talk" is the most difficult category for trainees to master. You can play a segment once and ask trainees to focus on coding everything but the caregiver talk, then play the segment again just to catch the language.
- We have arranged the training segments so they start out simple and become more difficult. By the time you get to the last five-minute segment, trainees should be close to coding in real time, with few pauses. We found that by the fourth segment, "Julian," the trainees wanted us to leave the tape running so they could get a feel for the length of the 10-second record period.
- Some trainees find coding straightforward and easy to pick up; others need a slower pace of presentation.
- To make the training lively, ask trainees to take turns leading the group through the codes for each 20-second observation.

V. USING THE TEST TAPE AND TEST SCRIPTS

- After training, make the training tape available for trainees to practice coding in real time.
- Ask trainees to go out in the field and practice using the C-COS at a child care center and in a family child care home. The optimal situation is for them to go out in groups and spend some time discussing their ratings after the observation.
- When trainees feel that they are ready, ask them to take the C-COS test by watching the C-COS test tape in real time, without pausing the tape during any of the test segments. There are five test segments.
- Do not distribute the test scripts to trainees until after they have taken the reliability test. The test scripts are formatted in the same way as the training scripts.
- Using the test scripts, compare the master code ratings with the codes the trainees recorded. Determine the passing standard for your purposes. Calculate inter-rater reliability.

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APPENDIX A CHILD-ADULT ACTIVITY COUNT

CHILD-ADULT ACTIVITY COUNT

Conduct a count every 20 minutes. If the group is in separate areas (for example, some outside, some inside) take the count of the group with the Focus Child. **Do not** double count children in Section E. Record the time each count was done.

For the activity counts, circle the FC icon next to the activity that includes the **Focus Child**.

A.	COUNT WAS TAKEN		
	INSIDE		
	OUTSIDE		
B.	IS FOCUS CHILD PART OF THE COUNT?		
	YES		
	NO 00		
C.	ADULTS _		
D.	NUMBER OF CHILDREN CRYING _	F C	
			RECORD WHAT FC IS DOING
E.	CHILDREN		
	1. Snack/meal/feeding		S FC
	2. In crib/swing/other sleeping place		F C
	3. Being diapered/in bathroom		f c
	3. Being diapered/in bathroom4. Free play		S FC
			_
	4. Free play		E FC
	4. Free play5. Wandering/unoccupied		S FC
	4. Free play5. Wandering/unoccupied6. Art		FC FC
	4. Free play5. Wandering/unoccupied6. Art7. Music		FC FC FC
	 4. Free play 5. Wandering/unoccupied 6. Art 7. Music 8. On walk 		FC FC FC

APPENDIX B

THE CHILD-CAREGIVER OBSERVATION SYSTEM CODING MANUAL

I. INTRODUCTION

The Child-Caregiver Observation System (C-COS) was developed for the Early Head Start national evaluation project with funding from the U.S. Department of Education, Office of Educational Research and the Improvement, and the U.S. Department of Health and Human Services, Administration on Children, Youth and Families. It was developed by Kimberly Boller and Susan Sprachman of Mathematica Policy Research, Inc. C-COS is based on instruments developed by the National Institute of Child Health and Human Development (NICHD) Early Child Care Research Network (Observational Record of the Caregiving Environment) and by Carollee Howes (Adult Involvement Scale).

This manual is designed for observers who will be using the C-COS in child care settings. The information in the manual supplements information to be presented during training and on the training videotapes.

We use the term "focus child" or FC to designate the child whose interactions and activities you will be observing. "Direct provider of care" or DP is used to describe the caregiver with primary responsibility for the focus child throughout the day. During training and on the reliability test tapes, you will hear the term "Child-Focused Observation" used to describe the activity you are performing as you do the observation.

A. OBSERVER ACTIVITIES

You will be observing and recording the behavior of the focus child, as well as any caregiver behavior directed toward the child. Once you begin an observation/record period, attend to the focus child. If the child leaves the room, follow her/him. If the group goes outside, go with them. During

¹Parts of this coding manual were adapted from the procedures described in the NICHD Early Child Care Research Network's 24-month child care manual.

this observation, try not to let the focus child know that she or he is being observed. This means looking at the group and avoiding eye contact with the child. As behaviors occur, make mental notes of those you know are on the coding sheet. For most of the behaviors, you will be noting all the behaviors that apply. This means you do not have to remember whether the caregiver directed two requests for language toward the focus child; all you have to do is record that the behavior occurred.

We recommend that each observation period start with a *Child-Adult Activity Count* (C-COS Instructor's Manual, Appendix A) to provide the context for the C-COS that follows. A C-COS that reflects minimal interaction and activity is better understood when put in the context of the focus child napping. Similarly, documenting that the child is being fed--then, in the C-COS, having minimal talking or interaction with a provider--helps the analyst understand what is or is not happening to the child when he or she is in child care. Your instructor will inform you if you will use a count procedure and what it will entail.

Immediately after you have completed the count, begin a five-minute observation/recording period. Start your observation at a time that ends in 00. For example, begin the observation at 9:14:00, not at 9:14:15. This will make it easier to keep track of when observations should be done. You will be wearing a tape recorder and an earphone that will signal when to observe and when to record. Bring along a timer, in case the tape recorder malfunctions; if the tape recorder is not working, you will have to time the observe and record periods yourself. The tape will signal you when to start watching the child by telling you: "Observe." It will then signal when to start recording what you have seen and heard by telling you: "Record."

During each five-minute observation/recording period, you will observe the focus child for 20 seconds and then look down at your coding sheet and record what you saw for 10 seconds. Then you observe again for 20 seconds. Make sure you code only the behaviors that occurred in the 20-second

observe period. During this period, give the child your undivided attention--make mental notes but no written ones. Do not record anything on your coding sheet during the observe periods; record only what you have observed during the record periods. Continue the cycle of 20 seconds of observation and 10 seconds of recording until you have filled one coding sheet (five minutes will have elapsed). Because you will be making the child-focused observations every 20 minutes, you will complete six 5-minute observation/coding periods during your two-hour visit to the child care setting.

Use the record periods to check systematically through the list of behaviors from top to bottom to make sure you have noted everything that happened. For most of the scales, either the behavior occurred (mark it), or it did not (leave it blank). Even if the behavior occurred more than once in the interval, mark it only once. With rare exceptions (discussed below and in training), do not double count any behaviors.

B. PREPARING FOR THE OBSERVATION

When you arrive at the child care setting, it is very important that you confirm whether the focus child's primary caregiver is present. Note the primary caregiver's appearance and clothing, so you can distinguish this person from the other caregivers. On the C-COS form, the focus child's primary caregiver is called the "direct provider of care." If no primary caregiver is assigned, or if the focus child's primary caregiver is absent and you cannot return on a different day, use the lead teacher as the direct provider of care for your observation. Although we are interested in the behavior of all the caregivers toward the focus child, for some items we want to take a more intensive look at how the focus child's primary caregiver interacts with the child.

Code the behavior of all adults who provide care for children in the setting you are observing. For example, if the center director visits the classroom and interacts with the focus child, code the director's behavior. Do not code the behavior directed toward the focus child of a parent who is

dropping off another child. However, if a parent stays in the classroom as a volunteer and provides care for the children, code his or her behavior, because the parent's presence is part of the child care experience for our focus child.

C. CODING USING THE C-COS

The next section of this manual presents an overview of the C-COS form. It then defines the categories of talk and interaction you will be coding. Review the C-COS form (Exhibit 1).

The form contains five categories of behavior and interaction, which are coded 10 times over the course of a five-minute observation. There are also three overall quality ratings that are coded once at the end of the five minutes. The five categories of behavior and interaction are:

- 1. The type of talk any caregiver engages in with the focus child
- 2. Who the focus child talks to
- 3. Who the focus child is interacting with or attending to
- 4. The focus child's affect and whether or not he was being annoyed or was annoying others
- 5. Who the main caregiver was who was interacting with the focus child or who was attempting to interact with the child

The three overall quality ratings examine the overall behavior of caregivers toward the focus child, the behavior of the focus child toward any caregivers, and the behavior of the focus child toward other children.

1. Type of Caregiver Talk

For these codes, you are listening and watching to see whether any caregivers speak to the focus child or to the focus child in a group or if caregivers respond to the focus child's speech or attempts to speak. Language not directed toward the focus child or the focus child as part of a larger group is not coded. For example, if the focus child is sitting at the art table with a caregiver and a few other children, and the caregiver asks one of the children if he needs more paint, this would not be coded because the language was not directed at the focus child. However, if at the end of art time, the caregiver says, "Start cleaning up," then the language would be coded because the caregiver's directive was meant for all the children.

For this category, you may code multiple types of talk. As discussed below, if you code that the caregiver responded to a child's talk, you will always code the type of talk the caregiver used. In addition, it is possible, in a 20-second segment, for caregivers to use various types of talk.

a. Responds to Focus Child's Talk

Code this if the caregiver listens to the child's words or attempts to say words and the caregiver responds verbally. To receive credit for this, the caregiver must *respond* to what the child has *said*, not what the child is *doing*. If the child articulates specific words, the caregiver can use the same words, correct the child's pronunciation, extend the child's utterance, or answer the child's question; however, simply imitating the child's *nonverbal* vocalization is not coded. This is supposed to be a measure of "high-quality" caregiving, in that the caregiver is responding to the child's talk in a way that might conceivably extend, enhance, or encourage the child's language. The child may grunt and point meaningfully, rather than clearly articulate a word; to be coded on this item, however, the caregiver has to speak back to the child, not grunt back. "Responds" is not coded if the caregiver's response to the child's talk is "Shaddup!" This would not encourage the child's speech--quite the

EXHIBIT 1 CHILD-FOCUSED OBSERVATION FORM

Form of
ID #:
Interviewer ID #· I I I I

CHILD-CAREGIVER OBSERVATION SYSTEM CHILD-FOCUSED OBSERVATION FORM

EXHIBIT 1

CODING PERIOD: <i>START:</i> _ : AM/PM <i>END:</i> : _	_ _	_ AM/	PM	CHILI	D'S A	GE: _	Y	ears _	Mo	onths
CHECK ALL THAT APPLY	1	2	3	4	5	6	7	8	9	10
A. TYPE OF CAREGIVER TALK (ALL CODES IN "A" ARE FC/FC GROUP EXCEPT RESPONDS)										
Responds to FOCUS CHILD (FC) Talk (CODE TYPE BELOW)										
Language or Communication Requested										
Action Requested										
Reading										
Other Talk/Singing										
B. FC TALKS TO										
Self or Unknown										
Other Child(ren)										
Direct Provider										
Other Caregivers										
C. FC INTERACTION WITH OR ATTENDING TO										
Other Child(ren) or Group										
Caregiver										
Material (Played with or explored)										
Television or Video										
None: Wandering/Unoccupied										
D. FC WAS										
Smiling/Laughing										
Upset/Crying										
Being Hit/Bit/Bothered by Other Child										
Hitting/Biting/Bothering Other Child										
E. THE MAIN CAREGIVER INTERACTING OR ATTEMPTING TO INTER	RACT	WITI	H FC	WAS			CHE	CK ON	IE ONL	Υ
Direct Provider of Care										
Other Caregiver										
All Caregivers Roughly Equal										
No Interaction										

OVERALL QUALITY RATINGS

CODE AT END OF 5 MINUTES

		Ignoring/ None	All Negative	Mostly Negative	Mostly Positive/ Neutral	All Positive/ Neutral
F.	CAREGIVER BEHAVIOR → FC	0	1	2	3	4
G.	FC BEHAVIOR → CAREGIVER	0	1	2	3	4
Н.	FC BEHAVIOR → OTHER CHILD(REN)	0	1	2	3	4

contrary. A response like this, that inhibits or stops the child from talking, is not coded as "Responds," even though, literally, it is a response to the child's speech.

Caregiver responses are *always* double coded, meaning that the adult's response is coded as a response, then also as the *type* of language it is. For example, if the focus child says to the caregiver, "My ball," and the caregiver responds by saying, "Yes, that's your ball," you would check "Responds to Focus Child's Talk" as well as "Other Talk/Singing."

Examples: The child says "Uh, uh," pointing to a toy dog and the adult says, "Doggie. That's a doggie." The child says "Uppy," and the caregiver responds "Shall I pick you up?" The child says "Me go," and the adult says, "You want to go out?"

b. Language or Communication Requested

To receive credit in this category, the caregiver says something to the child that *invites or prompts* language or communication on the part of the child. Often, but not always, this will be in the form of a question. Whether alone or part of a group, the child must at least potentially have the opportunity to respond.

Examples: "Are you hungry now?" "Are you excited to see Daddy?" "Do you want me to tickle your tummy?" "Who is that?" "Is that your mommy?" "Where are your socks?" "What do you have?" "Do you want a turn on the swing?" "Tell me what that is."

c. Action Requested

Code this when the caregiver asks a question or makes a statement that prompts the child to do something but does not require a communicative response. You will usually use this code when the caregiver tells the child to do something or not do something, or she gives an order, demand, command, or prohibition or she makes a request. The demand may be for an action the child is

willing to do or unwilling to do; the child may comply with the request or not comply. Do not code commands that are in songs (for example, "If You're Happy and You Know It, Clap Your Hands"); this is coded as "Other Talk/Singing."

Examples: "Sit down." "Would you put that on the shelf?" "Stop talking!" "Can you put the crayons back?" "Please eat your snack."

d. Reads

The caregiver reads from a book, magazine, paper, or any other written material to the child or to the group that the focus child is part of. This can be reading single sentences or a complete story, but it is definitely reading, not just pointing at pictures in a book. The child may or may not be listening and learning; the point is only that the caregiver is reading, and the child is there.

Examples: Reading a story at circle time, reading as the child falls asleep, reading a poster on the wall to the focus child.

e. Other Talk/Singing

The caregiver directs an utterance to the child individually or as part of a group that has not already been coded as "Reads," "Language or Communication Requested," or "Action Requested." The utterance should contain words, not just sounds. A single sentence will do. Also included as "Other Talk/Singing" are requests to the child to change his or her emotional state--requests that an upset child cannot decide to comply with. Examples of this are requests to a child: "Smile" or "Don't be sad." Singing also is "Other Talk/Singing." If the caregiver is singing along to a record, this would be coded as "Other Talk/Singing" only if it is directed to the target child. The caregiver would have to be looking at the child, possibly holding the child, not vacuuming or doing the dishes

or looking out the window. If the observer cannot hear what is being said clearly, code it as "Other Talk/Singing."

Examples: "That's red." "The bottle's empty--no more." "Your mom will be coming soon." "This is Johnny."

e. Practice Exercise

Complete the exercise (Exhibit 2) to check your understanding of the rules for determining type of caregiver talk. The answer key for the exercise will be distributed during training.

2. FOCUS CHILD TALKS TO ...

This category complements the first, in that you are coding the person or persons, if any, to whom the child is talking. For this category, code all the different people the child talks to during the 20-second observation period.

The child must say something in words or in sounds that are clearly communicative. If the utterance is directed at more than one person--for example, another child AND a caregiver--you should check all that apply. However, you would not code the same utterance as "Self or Unknown" and one of the other categories.

a. Self or Unknown

The child is talking or singing to herself, or you cannot tell to whom her utterance is directed.

b. Other Child(ren)

The child is talking or singing to another child or to a group of children.

EXHIBIT 2

EXERCISE

Examples of caregiver language.

Language or Communication Requested	Action Requested	Other Talk
"Do you want me to push you?"	"Don't do that."	"Kevin is busy."
"What flavor is your cake?"	"You push Lyla in the swing."	"You are going really high."
"Are you sharing?"	"Don't lick that, it's dirty."	"We'll finish it later."

Check the appropriate box for language type.

Caregiver Language		Language or Communication Requested	Action Requested	Other Talk
1	"Kylie, you come too."			
2	"Juicy oranges."			
3	"Sean, help look after her."			
4	"Here, put your cake on this plate."			
5	"Is that yummie, Lyla?"			
6	"Lyla, put that over there."			
7	"That doesn't bounce, does it?"			
8	"Sean, can you go slower please?"			
9	"Go up another one, one more step Lyla."			
10	"Please help me."			
11	"Kylie, would you like an orange?"			
12	"The others are late today."			

Child-Caregiver Observation System EXERCISE TYPE OF CAREGIVER TALK

	Caregiver Language	Language or Communication Requested	Action Requested	Other Talk
13	"Go and see what Flora has got ready outside."			
14	"Lyla, can you let Kylie have that one please?"			
15	"Lyla's wearing blue; she has a blue dress on."			
16	"Look, it bounces."			
17	"Do you like blue or silver?"			
18	"Kylie, go this way."			
19	"Thank you."			
20	"Very good, all right."			
21	"Do you want to wash your face too?"			
22	"Okay, you are all done."			
23	"You are going to grow a new tooth there to fill in the gap."			
24	"All right, I'll be right back."			
25	"Lyla, don't lick that, just pretend."			
26	"You know where your cubby is."			
27	"Would you like a piece, Lyla?"			
28	"This is going to be a nice picture for Daddy."			
29	"That's nice, Lyla."			

c. Direct Provider

The child is talking or singing to the direct provider of care.

d. Other Caregivers

The child is talking or singing to another caregiver(s), but not to the direct provider of care.

3. FOCUS CHILD INTERACTION WITH OR ATTENDING TO ...

The preceding category, "Focus Child Talks to...," was designed to capture to whom the focus child is speaking. This category was designed to identify whether the child is interacting with or attending to other children or groups of children or caregivers, playing with or exploring materials, watching television or a video, or wandering/unoccupied. The interaction can go both ways--from the child to others, or to the child from caregivers or other children. Every time the child attends to a caregiver or other child, that is coded here. We define "attending" as looking at or orienting to a person (for example, turning around, tilting the head toward the person). If the group that includes the focus child is being instructed by a caregiver who is standing behind the focus child, and the focus child does not turn around to look at the caregiver, do not code the focus child as interacting with/attending to the caregiver.

a. Other Child(ren) or Group

The focus child talks to, listens to, looks at, touches, or is touched by another child. You should use this code also if the child is a passive member of a group. What we want to measure here is whether the child is socially isolated or gravitates toward being in proximity with other children.

b. Caregiver

The focus child talks to, listens to, looks at, touches or is touched by a caregiver.

c. Material

The focus child touches, carries, or plays with materials (including toys, play equipment, or other materials the child spends time attending to or interacting with). To qualify as interacting, the child must actively engage in playing with or exploring the material. For example, swinging on a swing would count, sitting on a chair would not. Thus, if a child picks up a crayon or block and idly holds it, or if the child simply touches a table, this would not be checked. If the child twirls around the crayon, chews on it, or bangs on the table, this would be coded. Because the child's intentions may not always be clear, some judgment is required on the part of the observer. The key is to look for some *intention* on the part of the child in his interaction with the material.

d. Televison or Video

Use this category to code the watching of television or a video. It may be coded in conjunction with other activities.

e. None: Wandering/Unoccupied

The focus child is not interacting with or attending to any person or material for a period of *at least five seconds*. Walking across the room to play with someone or to get a toy is not "Wandering/Unoccupied." Note that a child may be unoccupied for 5 or 10 seconds but occupied during the rest of the time. In this case, code "Wandering/Unoccupied" as well as any other appropriate interactive codes.

4. FOCUS CHILD WAS...

This category captures the child's affect and whether or not he was engaged in aggressive activity with another child.

a. Smiling/Laughing

The focus child smiles or laughs.

b. Upset/Crying

The focus child has a tantrum, yells in anger/frustration, looks sad or hurt, or is crying. Do not code this category if the child is momentarily upset but quickly moves on to a positive or neutral affect.

c. Being Hit/Bit/Bothered by Other Child

The focus child is hit, pushed, kicked, bit, or bothered by another child. This includes pulling hair, pinching, and any other form of aggression.

d. Hitting/Biting/Bothering Other Child

The focus child hits, pushes, kicks, bites, or bothers another child. This includes pulling hair, pinching, and any other form of aggression.

5. THE MAIN ADULT INTERACTING OR ATTEMPTING TO INTERACT WITH FOCUS CHILD WAS...

To help us determine how much time caregivers devote to interacting with the focus child, and, in particular, how much time the direct provider of care spends compared to everyone else, this scale asks you to determine who spent the most time interacting with or trying to interact with the focus child. There is also space for noting whether all the caregivers interacted equally or if there was no caregiver interaction with the focus child. Because children do not always attend to the caregivers, here, we will give the caregivers credit for trying to interact with the focus child even if the focus child is not listening. For example, if, for almost the entire 20 seconds, the caregivers are busy with other children, the focus child is playing alone, and then the direct provider of care tells the entire

group to clean up, but the focus child is still playing with a toy, here, the caregiver would "get credit" for her attempt at interaction. You would code the direct provider of care as the main caregiver interacting with the focus child. Only one response should be coded for this scale.

a. Direct Provider of Care

The direct provider of care has been the main caregiver interacting or attempting to interact with the focus child or the focus child as part of a group.

b. Other Caregiver

A caregiver other than the direct provider of care is the main caregiver who has interacted or attempted to interact with the focus child or the focus child as part of a group.

c. All Caregivers Roughly Equal

There has been caregiver interaction with the focus child or the focus child as part of a group, but no single caregiver has interacted more than the others; they have all interacted for approximately the same length of time.

d. No Interaction

None of the caregivers has interacted with the focus child or attempted to interact with the focus child.

D. OVERALL QUALITY RATINGS

At the end of each five-minute observation and recording cycle, complete the three items at the bottom of the coding sheet. For these items, you are asked to judge the quality of the caregiver

behavior toward the focus child, the focus child's behavior toward the caregivers, and the focus child's behavior toward the other children. The ratings are:

- (0) Ignoring or no interaction
- (1) All negative interaction
- (2) Mostly negative interaction, but some positive or neutral
- (3) Mostly positive or neutral interaction, but some negative interaction
- (4) All positive or neutral interaction.

1. Caregiver Behavior Toward Focus Child

Ignoring/None (0)

None of the caregivers has interacted with the focus child or the focus child as part of a group for the entire five-minute observation. It would still count as "Ignoring/None" if the caregivers were in proximity to the focus child but were engaged in adult conversation or watching television.

All Negative (1)

The caregiver interaction with the focus child or the focus child as part of a group has been negative for most of the five-minute observation. The caregivers have been speaking in harsh or angry tones to, yelling at, or punishing the focus child. The focus child has been allowed to harm herself/himself or others.

Mostly Negative or Mostly Positive (2 or 3)

Use codes 2 or 3 if there is a combination of negative and positive interaction, choosing 2 or 3, depending on which type of interaction is predominant over the five minutes.

All Positive/Neutral (4)

The caregiver interaction with the focus child or the focus child as part of a group has been positive or neutral for most of the five-minute observation. The caregivers have been speaking in pleasant/neutral tones to the child; there have been no incidents of yelling at the focus child, punishing the focus child, or allowing the focus child to harm herself/himself or others.

2. Focus Child Behavior Toward Caregivers

Ignoring/None (0)

The focus child has not interacted with any of the caregivers for the entire five-minute observation. It would still be coded as "Ignoring/None" if the focus child was in proximity to the caregivers but engaged in another activity such as watching television or playing with a toy.

Negative (1)

The focus child's interaction with the caregivers has been negative for most of the five-minute observation. The child has not complied with requests and has caused problems. The focus child has repeatedly been aggressive toward the caregivers (for example, hit, kicked, bit, pulled hair).

Mostly Negative or Mostly Positive (2 or 3)

Use codes 2 or 3 if there is a combination of negative and positive interaction, choosing 2 or 3, depending on which type of interaction is predominant over the five minutes.

Positive/Neutral (4)

The focus child's interaction with the caregivers has been positive or neutral for most of the five-minute observation. The child has spoken to or touched a caregiver in a calm, loving way. The

child has complied with requests and has not caused any problems. The focus child has not been aggressive toward the caregivers (hit, kicked, bit, pulled hair).

3. Focus Child Behavior Toward Other Children

Ignoring/None (0)

The focus child has not interacted with any of the other children for the entire five-minute observation. It would still be coded as "Ignoring/None" if the focus child was in proximity to the other children but engaged in another activity such as watching television or playing with a toy.

Negative (1)

The focus child's interaction with the other children has been negative for most of the fiveminute observation. The focus child has repeatedly been aggressive toward the other children (hit, kicked, bit, pulled hair).

Mostly Negative or Mostly Positive (2 or 3)

Use codes 2 or 3 if there is a combination of negative and positive interaction, choosing 2 or 3, depending on which type of interaction is predominant over the five minutes.

Positive/Neutral (4)

The focus child's interaction with the other children has been positive or neutral for most of the five-minute observation. The child has spoken to or touched another child in a calm, loving way. The focus child has shared toys/materials with another child. The focus child has not repeatedly been aggressive (hit, kicked, bit, pulled hair) toward the other children.

APPENDIX C EXERCISE ANSWER KEY

Child-Caregiver Observation System EXERCISE: ANSWER KEY TYPE OF CAREGIVER TALK

	Caregiver Language	Language or Communication Requested	Action Requested	Other Talk
1	"Kylie, you come too."		~	
2	"Juicy oranges."			~
3	"Sean, help look after her."		~	
4	"Here, put your cake on this plate."		~	
5	"Is that yummie, Lyla?"	V		
6	"Lyla, put that over there."		~	
7	"That doesn't bounce, does it?"	~		
8	"Sean, can you go slower please?"		~	
9	"Go up another one, one more step Lyla."		~	
10	"Please help me."		~	
11	"Kylie, would you like an orange?"	V		
12	"The others are late today."			~
13	"Go and see what Flora has got ready outside."		~	
14	"Lyla, can you let Kylie have that one please?"		~	
15	"Lyla's wearing blue; she has a blue dress on."			~
16	"Look, it bounces."			~
17	"Do you like blue or silver?"	V		
18	"Kylie, go this way."		~	
19	"Thank you."			~
20	"Very good, all right."			~
21	"Do you want to wash your face too?"	V		
22	"Okay, you are all done."			~
23	"You are going to grow a new tooth there to fill in the gap."			~

Child-Caregiver Observation System EXERCISE: ANSWER KEY TYPE OF CAREGIVER TALK

Caregiver Language		Language or Communication Requested	Action Requested	Other Talk
24	"All right, I'll be right back."			~
25	"Lyla, don't lick that, just pretend."		✓	
26	"You know where your cubby is."			✓
27	"Would you like a piece, Lyla?"	>		
28	"This is going to be a nice picture for Daddy."			✓
29	"That's nice, Lyla."			~

APPENDIX D TRAINING SCRIPTS

SCRIPT 1: Focus Child: DAVID

SCRIPT 1: Focus Child: DAVID, light brown hair, red "Pooh" shirt

Direct Provider: Light brown hair, hair up, light blue jeans

Main Activity: Free play and puzzle

Simple interaction with material and other children

Audible child's voice is not David's

SEGMENT 1 9:34:00 - 19 [DP comes into view, will see some talk from caregiver and

more interaction and a smile from FC]

A. Other "Thank you."

To other child and David: "Now, you can have one and David can have the

other."

C. Caregiver; Material; Other Children

D. Smiling [9:34:16] [look for this]

E. DP

SEGMENT 2 9:34:30 - 49

C. Child; MaterialE. No Interaction

SECMENT 2 0.25.00 10

SEGMENT 3 9:35:00 - 19

C. Material

E. No Interaction

SEGMENT 4 9:35:30 - 49

C. Material; Other Children [not wandering; purposeful motion]

E. No Interaction

SEGMENT 5 9:36:00 - 19

A. Language DP: Talking about the puzzle to group: Question: "What are these?"

Action To group: "Move back a little bit so we can put the pieces down."

Other Names different kinds of sea creatures.

C. Caregiver; Material; Other Children

E. DP

SCRIPT 1: Focus Child: DAVID

SEGMENT 6 9:36:30 - 49

A. Language "What do you have?..."

Action "Shall we find the other part of the starfish?"

Other "You have part of the starfish."

B. [Girl talks, not David]

C. Caregiver; Material; Other Children

E. DP

SEGMENT 7 9:37:00 - 19

A. Other "David's starfish"

"That might be him."

"Maybe we should move to a different area, 'cause everyone is stepping over

the pieces."

C. Caregiver; Material; Other Children

E. DP

SEGMENT 8 9:37:30 - 49

A. Other "We had another starfish piece. I don't know where he went."

C. Caregiver; Material; Other Children

E. DP

SEGMENT 9 9:38:00 - 19

A. Action "Here, move them back a little bit."

C. Material; Other Children; Caregiver

D. Being hit by other child

E. DP

SEGMENT 10 9:38:30 - 49

C. Other Children

E. No Interaction

OVERALL CODES

F. All Positive/Neutral

G. All Positive/Neutral

H. All Positive/Neutral

SCRIPT 2: Focus Child: SYDNEY

SCRIPT 2: Focus Child: SYDNEY, red pants, heart on shirt front, blond hair

Direct provider: Wide striped shirt Main activity: Doing puzzles

SEGMENT 1 9:43:30 - 49

A. Responds "Yes, that's corn."

Language "What's that?"

Other "Yes, that's corn."

"You can't eat that."

"Only real carrots." "That's a puzzle carrot."

"No, it's a puzzle."

B. DP

C. Caregiver; Material

E. DP

SEGMENT 2 9:44:00 - 19 A. Responds "Only the real one."

"Lettuce, lettuce for salad."

Language "What's that?"

Other "Only the real one."

"Lettuce, lettuce for salad."

"Big red tomato."
"And green lettuce."

B. DP, babble about puzzle pieces

C. Caregiver; Material

E. DP

SEGMENT 3 9:44:30 - 49 [There is a loud noise during this segment that catches FC's

attention]

A. Language "What's that?"

Action "Use separate hands."

Other "Good."

C. Caregiver; Material

E. DP

Child-Caregiver Observation System Training Scripts SCRIPT 2: Focus Child: SYDNEY

SEGM	IENT 4	9:45:00 - 19
A.	Other	"Corn."
Λ.	Other	"Carrots."
		"Tomatoes."
		"Very nice."
		"Thank you."
B.	DP, Self [9:4:	•
C.	Caregiver; M	
E.	DP	alciiai
L.	Di	
SEGM	IENT 5	9:45:30 - 49
A.	Responds	"What's his name?"
	Language	"Who's that?"
		"What's his name?"
	Other	"Oscar the Grouch."
B.	DP	
C. Caregiver; M		aterial
E.	DP	
ar ar		0.4600.40
	IENT 6	9:46:00 - 19
A.	Responds	"Yes, in the garbage can."
	Language	"Do you have a tissue?"
_	Other	"Yes, in the garbage can."
В.	DP	
C.	Caregiver; M	aterial
E.	DP	
SEGM	IENT 7	9:46:30 - 49
A.	Language	"Help?"
11.	Language	"Ok, where do you think the garbage can goes?"
	Action	"You put it in."
	Other	"I am going to give it back to you."
	- 	"Thank you."
B.	DP	,
C.	Caregiver; M	aterial
E.	DP	

SCRIPT 2: Focus Child: SYDNEY

SEGMENT 8 9:47:00 - 19

A. Action "Would you like to sit on the chair?"

"And then, turn it around."

Other "And then I'll sit on the chair."

"Whoops."

C. Caregiver; Material

D. Smiling [9:47:03]

E. DP

SEGMENT 9 9:47:30 - 49

A. Action "Come over here." Language "Can I help you?"

Other "Upside-down."
"Right-side-up."

"You're teasing me."

C. Caregiver; Material

D. Smiling

E. DP

SEGMENT 10 9:48:00 - 19

F. Language "Sydney, what are you doing?"

"Are you back?"

Action "Put Oscar's green head up here."

Other "Corn."

C. Caregiver

E. DP

OVERALL

F. All Positive/Neutral

G. All Positive/Neutral

H. All Positive/Neutral

SCRIPT 3: Focus Child: GRIFFIN

SCRIPT 3: Focus Child: GRIFFIN, blond hair, overalls

Direct Provider: Karen, dark hair, blue sweatshirt

Main Activity: Coloring

SEGMENT 1		10:02:00 - 19	
	Daamanda	6637 11 0	

A. Responds "You want yellow?"

Language "You want yellow?"

Other "Look at this" [hands FC crayon]
[Repeats yellow and names peach.]

B. DP

C. Caregiver; Material

E. DP

SEGMENT 2 10:02:30 - 49

A. Responds "You have colors." [right at start of segment]

Other "You have colors."

B. DP [FC makes a complaint]

C. Caregiver; Material

E. DP

SEGMENT 3 10:03:00 - 19

B. Self [Mumbles at start] "For my mommy."

DP "Mommy"

C. Caregiver; Material; Other Child

D. Smiling [10:03:13]

E. No Interaction

SEGMENT 4 10:03:30 - 49

A. Responds "You have new paper."

Language "You want new paper?"

Action "Don't rip."

Other "You have new paper."

"Be careful."

B. DP, Self

C. Caregiver; Material; Other Child

D. Smiling [right at start of segment]

E. DP

SCRIPT 3: Focus	Child:	GRIFFIN
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SEGM	MENT 5	10:04:00 - 19
B.	DP	"I want purple."
C.	Caregiver; M	1 1
E.	DP	
	21	
SEGN	IENT 6	10:04:30 - 49
A.	Responds	"More bo?"
	Language	"More bo?"
		"You want different colors?"
		"May I have them back?"
	Other	"I don't know what that means."
		"Here we go."
B.	DP	
C.	Caregiver; M	laterial
E.	DP	
SEGM	IENT 7	10:05:00 - 19
A.	Responds	"Yes, that's a heart."
	Action	"No, no, no."
	Other	"That's right."
		"Yes, that's a heart."
		"You have two, a red one and a blue one."
_		"See, right there."
В	DP	
C.	•	Iaterial; Other Child
E.	DP	
SEGM	MENT 8	10:05:30 - 49
A.	Responds	"You want me to make you a heart?"
11.	Language	"You want me to make you a heart?"
	Action	"Just wait a moment."
	Other	"Okay."
B.	DP	
C.	Caregiver; M	Iaterial
E.	DP	
 -		
SKIP		10:06:00 - 19

SCRIPT 3: Focus Child: GRIFFIN

SEGMENT 9 10:06:30 - 49

A. Responds "There's a heart"

Action "Can you color that heart?"

Other "There's a heart."

"Here's a heart for you."

B. DP; Other Child [10:06:39]

C. Caregiver; Material; Other Child

E. DP

SEGMENT 10 10:07:00 - 16

AT START, THE DP IS TALKING TO OTHER CHILD

C. Caregiver; Material; Other Child

E. No Interaction

OVERALL CODES

F. All Positive/Neutral

G. All Positive/Neutral

H. All Positive/Neutral

SCRIPT 4: Focus Child: JULIAN

SCRIPT 4: Focus Child: JULIAN, brown hair, blue plaid short overalls

Direct Provider: Woman with blue and white striped shirt and blue jeans

Main Activity: Outdoor play

SEGMENT 1 1:08:00 - 19 "Oh, thank you, Kylie" [rubs Julian's back] A. Other "Oh, give me a kiss" [talking as though she is Julian] "Okay, Julian" [as though she is the other child] В. Self ["AAAHHH"] "You know my..." DP C. Caregiver; Material; Other Child

E. DP

1:08:30 - 49

SEGMENT 2 Other Child

C. Other Child; Material

D. Smiling

B.

E. No Interaction

SEGMENT 3 1:09:00 - 19

B. Self

Other Child "Careful!"

C. Other Child; Material

D. **Bothering Other Child**

E. No Interaction

SEGMENT 4 1:09:30 - 49

Self[mumbling]; Other Child["Kyyylieee, come."] В.

C. Other Child; Material

E. No Interaction

1:10:00 - 19 **SEGMENT 5**

Wandering/Unoccupied C.

E. No Interaction

SEGMENT 6 1:10:30 - 49

C. Other Child; Wandering/Unoccupied; Material

D. **Bothering Other Child**

E. No Interaction

SCRIPT 4: Focus Child: JULIAN

SEGMENT 7 1:11:00 - 19

C. Material

E. No Interaction

SEGMENT 8 1:11:30 - 49

B. Self; Other Child

C. Other Child

D. Bothering Other Child

E. No Interaction

SEGMENT 9 1:12:00 - 19

B. Self; Other Child [mumbling and then "Helicopter?" or "Grasshopper?"]

C. Other Child

D. Bothering Other Child

E. No Interaction

SEGMENT 10 1:12:30 - 49

A. Other "Julian,..." [1:12:49]

C. Caregiver; Other Child; Material

D. Bothered by Other; Bothering Other Child

E. DP

OVERALL CODES

F. All Positive/Neutral

G. All Positive/Neutral

H. Mostly Negative

SCRIPT 5: Focus Child: JULIA

SCRIPT 5: Focus Child: JULIA, blond hair, flowered shirt, yellow pants

Direct Provider: Patty, Penn State sweatshirt

Main Activity: Pasting materials

SEGN	MENT 1	12:56:00 - 19
A.	Responds	"Say, come on, Alex."
	Other	"Say, come on, Alex."
B.	Child	"Wanna try it, Alex?"
C.	Other Child;	Material
E.	DP	

SEGMENT 2 12:56:30 - 49

A. [DP talks to other child, not coded, says, "Say thank you Julia."]

B. Child "Here you go, Alex."

C. Caregiver [FC hands DP leaf]; Other Child; Material

D. Bothered by other child

E. DP

E.

DP

SEGMENT 3

12:57:00 - 19

A. Responds [to FC babble], "Yeah, leaves on the table and in our project."

Other "Yeah, leaves on the table and in our project."

B. Self "Baby" [12:57:17]

C. Caregiver; Material

SEGMENT 4 12:57:30 - 49 A. Responds "Wow!"

Language "Julia, is this your leaf?"

"Is Julia going to put more?"

Action "Put more."
Other "Wow!"

"That's your leaf."

"See, Julia can put all those flowers on there."

"Put more."

B. DP

C. Caregiver; Material

E. DP

SCRIPT 5: Focus Child: JULIA

SEGN	MENT 5	12:58:00 - 19
A.	Responds	"What?"
	Language	"What?" "Oh, you want me to do those?"
		"You want me to do this one?"
		"Where?"
B.	DP	
C.	Caregiver; M	[aterial
E.	DP	
SEGN	MENT 6	12:58:30 - 49
A.	Responds	"Yeah, all the pieces, you gonna put all the pieces together?"
	r	"Yeah, did Julia paint that?"
	Language	"Yeah, all the pieces, you gonna put all the pieces together?"
	Zangaage	"Yeah, did Julia paint that?"
	Other	"No."
B.	DP	110.
C.	Caregiver; M	[aterial
E.	DP	into i tu
L.	DI	
SEGN	MENT 7	12:59:00 - 19
A.	Responds	"Yeah, we use that to paint."
71.	Other	"Yeah, we use that to paint."
B.	Self	"Baby." [12:59:09]
Ъ.	DP	"Paint."
C.		
C. E.	Caregiver; M DP	iateriai
E.	Dr	
CECN	AENIT O	12,50,20 40
	MENT 8	12:59:30 - 49 "Wow!"
A.	Responds	
	Language	"Does it go through?"
D	Other	"Wow!"
B.	Self	"Baby."
	DP	"Come on, Patty."
	a	"Look, Patty."
C.	Caregiver; M	laterial
E.	DP	

SCRIPT 5: Focus Child: JULIA

SEG	MENT 9	1:00:00 - 19
A.	Responds	"Oh, a baby, thank you, Julia."
	Other	"Sticks on Patty's sweatshirt."
		"Oh, a baby, thank you Julia."
B.	DP	"Oh look, Patty, a baby."
C.	Caregiver; N	Material
F	Db _	

E. DF

SEGMENT 10 1:00:30 - 49 [to FC babble], "Is Julia done?" A. Responds "Is Julia done?" Language B. DP Babble "Mine."

Caregiver; Material C.

E. DP

OVERALL CODES

F. All Positive/Neutral G. All Positive/Neutral H. All Positive/Neutral